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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,278	05/08/2001	Thomas M. Rothwein	M-11555 US	3426

33031   7590   02/16/2006

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EXAMINER
PHAM, KHANH B

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/851,278	ROTHWEIN ET AL.
	Examiner	**Art Unit**	
	Khanh B. Pham	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 November 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29,33-35,38-41,44-47 and 50-53* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29,33-35,38-41,44-47 and 50-53* is/are rejected.

7)☒ Claim(s) *25, 53* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   The amendment filed November 15, 2005 has been entered. Claims 1, 6, 11, 12,

16, 21, 24, 25, and 50 have been amended. Claims 1-29, 33-35, 38-41, 44-47 and 50-

53 are pending in this Office Action.

Claim Objections

2.   **Claims 25, 53** are objected to because of the following informalities:

- Claim 25, line 3: "an sixth set" should be replaced with "a sixth set";

- Claim 53, line 3: "a twelfth set" should be replaced with "an eighth set".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   **Claims 1-29,33-35,38-41,44-47,50-53 are rejected under 35 U.S.C. 102(b)** as

being anticipated by Pasi et al. ("Calculating Attribute Values Using Inheritance

Structures in Fuzzy Object-oriented Data Models"), hereinafter referred to as "**Pasi**".

        As per claim 1, Pasi teaches a method of arranging objects comprising:

- "setting a class hierarchy, wherein the class hierarchy comprises an upper level

  class and a lower level class" at the paragraph bridging Col.1 and Col. 2, page

  557;

(Pasi teaches classes can be organized into hierarchies

comprising "supperclass" and "subclass")

- "the objects are members of at least one of the upper level class and the lower

  level class" at the paragraph bridging Col.1 and Col. 2, page 557;

(Pasi teaches that an object is an instance of its immediate

class and is a member of the superclass of its immediate

class")

- "assigning a first attribute to the upper level class, wherein the first attribute

  describes the objects; and inheriting of the first attribute by the lower level class"

  at the paragraph bridging Col.1 and Col. 2, page 557 and page 562, Col. 1, 2nd

  paragraph.

(Passi assigns "haircolor" attribute to superclass, and "a

subclass inherits the attributes and methods of its

superclass")

- "wherein the first attribute is within a first domain with regard to the upper level

  class, the first attribute is within a second domain with regard to the lower level

  class, a second domain value set of the second domain is smaller than a first

  domain value set of the first domain" at page 562, Col. 1, 2nd paragraph;

(Pasi teaches a specific example in which hair-color attribute of the superclass C_2 is within a first domain value set {fair, light-brown, red, dark-brown, black} and hair-color attribute of the subclass C_1 is within a second domain value set {fair, light-brown, red}, which is smaller than the first domain value set)

- "the first attribute is restricted to the second domain value set upon the inheriting" at page 562, Col. 1, 2nd paragraph;

(Pasi teaches that the hair color attribute for an object (person) belonging to subclass C1 is restricted to the second domain value set {fair, light-brown, red})

- "assigning a second attribute to the lower level class, wherein the second attribute describes an object associated with the lower level class"

(Pasi assigns a second attribute (i.e., "typical hair color" to the subclass)

- "choosing a class with which to associate an object, wherein the class is chosen such that every attribute associated with the class has non-null value used to describe the object" at page 562, Col. 1, 2nd paragraph;

(Pasi associates a person with the class "people living in Italy", wherein all entries include a record describes the person's hair-color, which must be non-empty because hair-color must have a value, the typical haircolor associated with

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object in subclass are also non-null because hair color are

selected from the set {fair, light-brown, red})
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- "said method is performed by a processor configured to perform said method" at

   page 556, Col. 1.

As per claim 2, Pasi teaches the method of arranging objects of claim 1, further

comprising: "superseding said first attribute of said upper level class by assigning a third

attribute to the lower level class, wherein the third attribute describing an object that is a

member of the lower level class" at page 562, Col. 1, 2nd paragraph and page 563, Col.

1.

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(Pasi teaches at page 563, Col. 1 that the new attribute

characterizing the objects belonging to the subclass C₁

overriding (i.e., "superceding") the attribute defined in the

superclass C₂)
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As per claim 3, Pasi teaches the method of arranging objects of claim 1,

wherein "the first attribute comprises a distinctive domain value set" at page 562, Col. 1,

2nd paragraph.

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(Pasi teaches the hair-color attribute comprise a distinctive

domain value set {fair, light-brown, red, dark-brown, black})
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As per claim 4, Pasi teaches the method of arranging objects of claim 1,

wherein "the class hierarchy further comprises a third class below the lower level class

in the class hierarchy, and further comprising: inheriting of the attribute by the class" at

page 560, Fig. 1.

(Pasi teaches a hierarchical structure comprising four levels
inheriting of the attribute by the class.)

As per claim 5, Pasi teaches the method of arranging objects of claim 1, further comprising: "expanding the class hierarchy horizontally by adding a fourth class to the lower level class; and inheriting of the first attribute by the class" at page 560, Fig. 2. (Pasi teaches expanding the class hierarchy horizontally (Frame
1 and Frame 2) instead of vertically as seen in Fig. 1)

As per claim 6, Pasi teaches a hierarchical class architecture of objects stored in a memory comprising:

- "an upper level class; a lower level class, wherein the upper and lower level classes are stored in the memory" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "a first domain value set of a first domain of the upper level class; a second domain value set of a second domain" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "a first attribute, wherein the first attribute is assigned to the upper level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "the first attribute is within the first domain, the first attribute is within the second domain, the objects are members of at least one of the upper level class and the lower level class, the first attribute describes the objects" at page 562, Col. 1, 2nd paragraph,

- "the lower level class is configured to inherit the first attribute" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "the second domain value set is smaller than the first domain value set, and the first attribute is restricted to the second domain value set upon the attribute being inherited by the lower level class" at page 562, Col. 1, 2nd paragraph;

- "a second attribute, wherein the second attribute is assigned to the lower level class, the second attribute is within the second domain, and the second attribute describes an object associated with the lower level class" at page 562, Col. 1, 2nd paragraph;

- "each object in the hierarchical class architecture objects is associate with a chosen class within the class hierarchy, wherein the class is chosen such that every attribute associated with the class has a non-null value used to describe the object" at page 562, Col. 1, 2nd paragraph.

As per claim 7, Pasi teaches the hierarchical class architecture of claim 6, further comprising: "an additional attribute, wherein the additional attribute is assigned to the lower level class, and the attribute describes an object in the lower level class" at Fig. 3, elements 96, 98. page 562, Col. 1, 2nd paragraph and page 563, Col. 1.

As per claim 8, Pasi teaches the hierarchical class architecture of claim 6, wherein "the first attribute comprises a distinctive domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 9, Pasi teaches the hierarchical class architecture of claim 6, further comprising: "a third class, wherein the third class is below the lower level class in the hierarchical class architecture, and the third class is configured to inherit the first attribute and the second attribute" at page 560, Fig. 1.

As per claim 10, Pasi teaches the hierarchical class architecture of claim 6, wherein "the lower level class is configured to be expanded horizontally by virtue of being configured to provide for addition of a fourth class, and the fourth class is configured to inherit the first attribute" at Fig. 2, page 560.

As per claim 11, Pasi teaches a computer system comprising:

- "a processor, a computer readable medium coupled to the processor; and computer code, encoded in the computer readable medium, configured to cause the processor to: set a class hierarchy, wherein the class hierarchy comprises an upper level class and a lower level class" at page 556, Col. 1 and the paragraph bridging Col. 1 and Col. 2, page 557.

- "the objects are members of at least one of the upper level class and the lower level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "assign a first attribute to the upper level class, wherein the first attribute describes the objects; and provide inheritance of the first attribute by the lower level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "wherein the first attribute is within a first domain with regard to the upper level class, the first attribute is within a second domain with regard to the lower level class, a second domain value set of the second domain is smaller than a first domain value set of the first domain" at page 562, Col. 1, 2nd paragraph;

- "the first attribute is restricted to the second domain value set upon the inheritance of the attribute by the lower level class" at page 562, Col. 1;

- "assign a second attribute to the lower level class, wherein the second attribute describes an object associated with the lower level class; and choose a class with which to associate an object, wherein the class is chosen such that every attribute associated with the class has non-null value used to describe the object" at page 562, Col. 1.

As per claim 12, Pasi teaches the computer system of claim 11, wherein "the computer code is further configured to cause the processor to: "assign a third attribute to the lower level class, the third attribute describing an object that is a member of the lower level class" at page 562, Col. 1, 2nd paragraph.

As per claim 13, Pasi teaches the computer system of claim 11, wherein "the first attribute comprises a distinctive domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 14, Pasi teaches the computer system of claim 11, wherein "the class hierarchy further comprises a third class below the lower level class in the class hierarchy, and the computer code is further configured to cause the processor to: provide inheritance of the first attribute and the second attribute by the third class" at Fig. 1, page 560.

As per claim 15, Pasi teaches the computer system of claim 11, wherein "the computer code is further configured to cause the processor to: expand the class hierarchy horizontally by adding a fourth class to the lower level class; and provide inheritance of the first attribute by the fourth class" at Fig. 2, page 560.

As per claim 16, Pasi teaches an apparatus for arranging objects comprising:

- "means for setting a class hierarchy, wherein the class hierarchy comprises an upper level class and a lower level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "the objects are members of at least one of the upper level class and the lower level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "means for assigning a first attribute to the upper level class, wherein the first attribute describes the objects" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "means for inheriting of the first attribute by the lower level class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "wherein the first attribute is within a first domain with regard to the upper level class, the first attribute is within a second domain with regard to the lower level class, a second domain value set of the second domain is smaller than a first domain value set of the first domain" at page 562, Col. 1, 2nd paragraph;

- "and the first attribute is restricted to the second domain value set by the means for inheriting" at page 562, Col. 1, 2nd paragraph;

- "means for assigning a second attribute to the lower level class, wherein the second attributes describes objects associated with the lower level class; and means for choosing a class with which to associate an object, wherein the class is chosen such that every attribute associated with the class has non-null value used to describe the object" at page 562, Col. 1.

As per claim 17, Pasi teaches the apparatus of claim 16, further comprising:

- "means for superseding said first attribute of said upper level class comprising means for assigning a third attribute to the lower level class, wherein the third attribute describes an object that is associated with the lower level class" at page 562, Col. 1, 2nd paragraph and page 563, Col. 1;

As per claim 18, Pasi teaches the apparatus of claim 16, wherein "the first attribute comprises a distinctive domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 19, Pasi teaches the apparatus of claim 16, wherein "the class

hierarchy further comprises a third class below the lower level class in the class

hierarchy, and further comprising: means for inheriting of the first attribute and the

second attribute by the third class" at Fig. 1, page 560.

As per claim 20, Pasi teaches the apparatus of claim 16, further comprising:

"means for expanding the class hierarchy horizontally by adding a fourth class to the

lower level class; and means for inheriting of the first attribute by the class" at Fig. 2,

page 560.

As per claim 21, Pasi teaches a computer program product, encoded in

computer readable media, comprising:

- "a first set of instructions, executable on a computer system, configured to set a

  class hierarchy, wherein the class hierarchy comprises an upper level class and

  a lower level class, and the objects are members of at least one of the upper

  level class and the lower level class" at the paragraph bridging Col. 1 and Col. 2,

  page 557;

- "a second set of instructions, executable on the computer system, configured to

  assign a first attribute to the upper level class, wherein the first attribute

  describes the objects; a third set of instructions, executable on the computer

  system, configured to provide inheritance of the first attribute by the lower level

  class" at the paragraph bridging Col. 1 and Col. 2, page 557;

- "wherein the first attribute is within a first domain with regard to the upper level class, the first attribute is within a second domain with regard to the lower level class, a second domain value set of the second domain is smaller than a first domain value set of the first domain" at page 562, Col. 1, 2nd paragraph;

- "and the first attribute is restricted to the second domain value set by the third set of instruction" at page 562, Col. 1, 2nd paragraph;

- "a fourth set of instructions, executable on the computer system, configured to assigned a second attribute to the lower level class, wherein the second attribute describes an object associated with the lower level class" at page 562, Col. 1, 2nd paragraph;

- "a fifth set of instructions, executable on the computer system, configured to choose a class with which to associate an object, wherein the class is chosen such that every attribute associated with the class has a non-null value used to describe the object" at page 562, Col. 1.

As per claim 22, Pasi teaches the computer program product of claim 21, further comprising: "a sixth set of instructions, executable on the computer system, configured to supersede said first attribute of said upper level class by virtue of being configured to assign a third attribute to the lower level class, the third attribute describing an object that is associated with the lower level class" at page 562, Col. 1, 2nd paragraph.

As per claim 23, Pasi teaches the computer program product of claim 21, wherein "the first attribute comprises a distinctive domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 24, Pasi teaches the computer program product of claim 21, wherein "the class hierarchy further comprises a third class below the lower level class in the class hierarchy, and further comprising: a sixth set of instructions, executable on the computer system, configured to provide inheritance of the first attribute and the second attribute by the third class" at Fig 1, page 560.

As per claim 25, Pasi teaches the computer program product of claim 21, further comprising: "a sixth set of instructions, executable on the computer system, configured to expand the class hierarchy horizontally by adding a fourth class to the lower level class; and a seventh set of instructions, executable on the computer system, configured to provide inheritance of the first attribute by the fourth class" at Fig. 2, page 560.

As per claim 26, Pasi teaches the method of arranging objects of claim 1, further comprising: "associating the upper level class with the first domain value set, and associating the lower level class with the second domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 27, Pasi teaches the method of arranging objects of claim 26, wherein "another attribute is within the second domain" at page 562, Col. 1, 2nd paragraph.

As per claim 28, Pasi teaches the method of arranging objects of claim 27, wherein "the another attribute is an overriding attribute" at page 563, Col. 1.

As per claim 29, Pasi teaches the method of arranging objects of claim 27, further comprising: "superceding the attribute with the another attribute, wherein the superceding is performed if the second domain is different from the first domain" at page 563, Col. 1.

As per claim 33, Pasi teaches the hierarchical class architecture of objects of claim 6, further comprising: "another attribute, wherein the another attribute is another attribute within the second domain " at page 563, Col. 1.

As per claim 34, Pasi teaches the hierarchical class architecture of objects of claim 33, wherein "the another attribute is an overriding attribute" at page 563, Col. 1.

As per claim 35, Pasi teaches the hierarchical class architecture of objects of claim 33, wherein, "the another attribute is configured to supercede the attribute, and

the another attribute supercedes the attribute if the second domain is different from the

first domain" at page 563, Col. 1.

As per claim 38, Pasi teaches the computer system of claim 11, wherein "the

computer code is further configured to cause the processor to: associate the upper level

class with the first domain value set, and associate the lower level class with the second

domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 39, Pasi teaches the computer system of claim 38, wherein

"another attribute is within the second domain" at page 563, Col. 1.

As per claim 40, Pasi teaches the computer system of claim 39, wherein "the

another attribute is an overriding attribute" at page 563, Col. 1.

As per claim 41, Pasi teaches the computer system of claim 39, wherein "the

computer code is further configured to cause the processor to: supercede the attribute

with the another attribute, if the second domain is different from the first domain" at

page 563, Col. 1.

As per claim 44, Pasi teaches the apparatus of claim 16, wherein "the computer

code is further configured to cause the processor to: associate the upper level class

with the first domain value set, and associate the lower level class with the second

domain value set" at page 562, Col.1, 2nd paragraph.

As per claim 45, Pasi teaches the apparatus of claim 44, wherein "another

attribute is within the second domain" at page 562, Col. 1, 2nd paragraph.

As per claim 46, Pasi teaches the apparatus of claim 45, wherein "the another

attribute is an overriding attribute" at page 563, Col. 1.

As per claim 47, Pasi teaches the apparatus of claim 45, further comprising:

"means for superceding the attribute with the another attribute, wherein the superceding

is performed if the second domain is different from the first domain" at page 562, Col. 1,

2nd paragraph.

As per claim 50, Pasi teaches the computer program product of claim 21, further

comprising: "a sixth set of instruction, executable on the computer system, configured to

associated the upper level class with the first domain value set, and a seventh set of

instruction, executable on the computer system, configured to associate the lower level

class with the second domain value set" at page 562, Col. 1, 2nd paragraph.

As per claim 51, Pasi teaches the computer program product of claim 50, wherein "another attribute is within the second domain " at page 562, Col. 1, 2nd paragraph.

As per claim 52, Pasi teaches the computer program product of claim 51, wherein "the another attribute is an overriding attribute" at page 563, Col. 1.

As per claim 53, Pasi teaches the computer program product of claim 51, further comprising: "an eighth set of instruction, executable on the computer system configured to supercede the attribute with the another attribute, if the second domain is different from the first domain" at page 562, Col. 1, 2nd paragraph.

Response to Arguments

5.   Applicant's arguments filed November 14, 2005 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

Regarding the rejection of claims **1, 6, 11, 16 and 21** under 35 U.S.C 102(b), applicant argued that Pasi does not teach or suggest "choosing a class with which to associate an object, wherein the class is chosen such that every attribute associated with the class has a non-null value used to describe the object".

On the contrary, Pasi associates a person with the class "people living in Italy" (page 562, Col. 1, 2nd paragraph), wherein each object includes an attribute describes the person's hair-color, which must be non-null because hair-color must have a value;

as opposed to, for example, "work phone number", which could be an empty, or null field, because a person may or may not have a work phone number. Further, Pasi associates "a typical value with each attribute at the level of class definition", so that "a default value for the unknown object's attributes can be computed" (page 562, Col. 1). Therefore, each attribute describes the object having a non-null value because the attribute either has a correct value, default value, or imprecise value, but it never has a null value. Pasi teaches at page 556 two distinct cases of incompleteness of the value of an object's attribute, the first case is when the value of the object's attribute in unknown; in this case, a default value is computed and used. In the second case, even if the value of an object's attribute is imprecise, or vague, it still has a non-null value.

In Pasi, a class is chosen to associate with a person, based on the location where that person lives. For example, a person is assigned to class C2 if he/she lives in Italy and to class C1 if he/she lives in Trentino Alto Adige, which is a Northeast region of Italy. In all cases, the attributes associated with that person (e.g., "hair color" or "location where he/she lives") are always has non-null values. Pasi discusses a case where the value of attribute "hair color" is unknown; however, unknown is different from Null, because there is no Null color; and a default value is always used in place of the unknown value.

The examiner also notes that each of the class defined in the claims (e.g., "upper level class" and "lower level class") contains only **one** attribute (e.g., "the first attribute" or "the second attribute"), therefore, the claimed "every attribute associated with the class" comprises only **one** attribute. Consider the case where the object is Person and

the attribute is Name, then it doesn't matter what class a person is assigned to, the

Name attribute always has a "non-null value used to described the object" as claimed.

Applicant explained the advantage of the invention at page 15 of the Remark and

states that "In order to achieve this result, a class is chosen to be associated with an

object based on a criteria that the class has **a sufficient number and type of**

attributes such that every attribute associated with the class will have a non-null value

describing the object. That is the chosen class will have **no more associated**

attributes than are necessary to [the] describe the object". However, the claimed

limitations require only one attribute for each class, the claimed languages are therefore

do not reflect what applicants consider as their invention.

Further, the claimed limitation: "choosing a class with which to associate an

object, wherein the class is chosen such that every attribute associated with the class

has a non-null value used to describe the object" is disconnected from the rest of the

claim. The limitation requires "choosing **a** class" to associate "**an** object", there is no

connection between "**a** class" and the class hierarchy defined earlier in the claim, nor

"**an** object" and the objects defined earlier in the claim. The claimed "a class" and "an

object" could be interpreted to be any class and object, as long as they satisfy the

requirement that attribute associated with the class has a non-null value. For example, a

Person object is assigned to Human class with the Last Name attribute.

In light of the foregoing arguments, the 35 U.S.C 102 rejection is hereby

sustained.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to

4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

<div style="text-align:right">

Khanh B. Pham
Primary Examiner
Art Unit 2166

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February 10, 2006